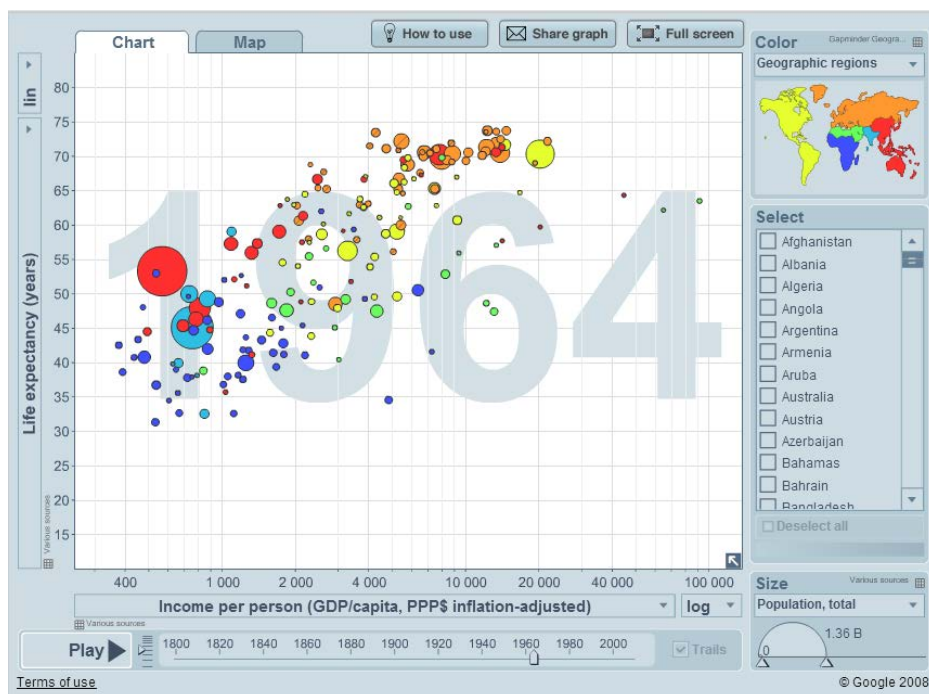


Using Gapminder.org in the Classroom



A Student's Introduction

Algebra 1
Teachers

1. Go to WWW.GAPMINDER.ORG and click on the GAPMINDER WORLD tab. What is the first thing you notice? (There are no wrong answers.)

2. What do the colors on the graph represent?

Red: _____

Lt. Blue: _____

Dk. Blue _____

Yellow: _____

Green: _____

Orange: _____

3. What information do you gain by putting your mouse over a colored circle on the graph?

4. What is the independent variable (x-axis)? _____

5. What is the dependent variable (y-axis)? _____

6. Push the PLAY button. What is this graphical representation telling you?

7. Select United States on the right side of the graph. After pushing the play button, you can gather information from the graph by hovering over a point. The data will show up in a white box on the x and y axis. Select five points and record the data here.

Income					
Life Expectancy					
Year					

8. What was the highest GDP in 2011? _____ What country? _____

9. What was the highest life expectancy in 2011? _____ What country? _____

10. As the GDP of a country increases, the life expectancy tends to _____

11. Change the variables on the x and y-axis to a different topic. Select a country that interests you and hit play. Fill in the table to represent your data.

12. What is the independent variable (x-axis)? _____

13. What is the dependent variable (y-axis)? _____

14. What does the size of the circle normally represent?

15. List at least four other variables that can be represented by the size of the circle?

16. This website has many graphs that have already been created. Click on the button at the top left of the page OPEN GRAPH MENU and select WHO HAS THE BEST TEETH from the bottom right (you may have to scroll down depending on the size of your screen.) After looking at the graph, please answer the following question. Are dental problems worse in the richest or the poorest countries? Please give at least three examples from the graph to support your answer.

1. Go to WWW.GAPMINDER.ORG and click on the GAPMINDER WORLD tab. What is the first thing you notice? (There are no wrong answers.)

Answers will vary.

2. What do the colors on the graph represent?

Red: **East Asia & Pacific**

Lt. Blue: **South Asia**

Dk. Blue **Sub-Saharan Africa**

Yellow: **America**

Green: **Middle East & North Africa**

Orange: **Europe and Central Asia**

3. What information do you gain by putting your mouse over a colored circle on the graph?

The country and coordinate values

4. What is the independent variable (x-axis)? **Income per person (GDP)**

5. What is the dependent variable (y-axis)? **Life Expectancy (years)**

6. Push the PLAY button. What is this graphical representation telling you?

In general, as the income per person increased the life expectancy tends to increase as well.

7. Select United States on the right side of the graph. After pushing the play button, you can gather information from the graph by hovering over a point. The data will show up in a white box on the x and y axis. Select five points and record the data here.

Income	vary				
Life Expectancy					
Year					

8. What was the highest GDP in 2011? **\$93818** What country? **Qatar**

- 9. What was the highest life expectancy in 2011? **83** What country? **Japan**
- 10. As the GDP of a country increases, the life expectancy tends to **increase**.
- 11. Change the variables on the x and y-axis to a different topic. Select a country that interests you and hit play. Fill in the table to represent your data.

vary					

- 12. What is the independent variable (x-axis)? **vary**
- 13. What is the dependent variable (y-axis)? **vary**
- 14. What does the size of the circle normally represent?

The population of the country

- 15. List at least four other variables that can be represented by the size of the circle?

Any four of the following:

-
- Children per woman (total fertility)
 - CO2 emissions (tonnes per person)
 - Income per person (GDP/capita, PPP\$ inflation-adjusted)
 - Child mortality (0-5 year-olds dying per 1,000 born)
 - Life expectancy (years)
 - Economy
 - Society
 - Education
 - Energy
 - Environment
 - Health
 - Infrastructure
 - Population
 - Work

16. This website has many graphs that have already been created. Click on the button at the top left of the page OPEN GRAPH MENU and select WHO HAS THE BEST TEETH from the bottom right (you may have to scroll down depending on the size of your screen.) After looking at the graph, please answer the following question. Are dental problems worse in the richest or the poorest countries? Please give at least three examples from the graph to support your answer.

Vary.